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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,948	09/25/2003	Remmelt Pit	HSJ9200030207US1	2049

7590

09/20/2005

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EXAMINER
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OLSON, JASON C

ART UNIT	PAPER NUMBER
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2651

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/670,948

Applicant(s)

PIT ET AL.

Examiner

Jason C. Olson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bement et al. (US 6,765,765), hereafter Bement and Kelemen (US 6,757,124).

Regarding claim 1, Bement teaches at least one rotatable disk (see figure 1, item 102), at least one slider juxtaposed with the disk (see figure 1, item 104); a suspension holding the slider (see figure 1, items 108); and a roll static attitude (RSA) bias mechanism to establish a RSA of the slider (see col. 3, ln. 65-col. 4, ln. 5, col. 4, ln. 62-col. 5, ln. 6, and figure 6, items 226 and 122). Bement fails to teach that the bias mechanism is coupled to the suspension; however, Kelemen is relied upon to teach a slider roll bias mechanism coupled to the suspension (see col. 8, ln. 1-5 and figure 9, item 116 and 304). It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the roll bias mechanism of Bement by applying the teaching of the roll bias mechanism coupled to the suspension as taught by Kelemen for the purpose of twisting the actuator arm and rolling the data transducer in a clockwise and counterclockwise direction.

Regarding claim 2, the combination of Bement and Kelemen teach all the limitations of claim 1 above and are further relied on to teach the bias mechanism includes at least one

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piezoelectric structure bonded to the suspension (see col. 8, ln. 13-15 and figure 9, items 302 and 304 of Kelemen). It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the roll bias mechanism of the combination by applying the teaching of piezoelectric structure bonded to the suspension as taught by Kelemen for the purpose as stated above.

Regarding claim 3, the combination of Bement and Kelemen teach all the limitations of claim 1 above and are further relied on to teach a HDD controller actuating the RSA bias mechanism (see col. 7, ln. 1-10 and figure 16 of Bement; it is obvious to an artisan in the art that a HDD controller is implemented in controlling the RSA bias mechanism as illustrated in figure 16).

Regarding claim 4, the combination of Bement and Kelemen teach all the limitations of claims above and are further relied on to teach HDD controller actuates the RSA bias mechanism to establish a zero RSA during read and write operations (see col. 1, ln. 40-42 and col. 7, ln. 1-10 of Bement; it is obvious to an artisan in the art that zero RSA is beneficial to the resolution and clarity of reading and writing and therefore controlling the RSA to be zero would provide optimum parameters.)

Regarding claim 5, the combination of Bement and Kelemen teach all the limitations of claims above and are further relied on to teach establishing a non-zero RSA during ramp load and unload operations (see col. 8, ln. 8-13 of Kelemen; the deliberate roll of the data transducer is a non-zero RSA). It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the roll bias mechanism of the combination by applying the teaching of non-zero RSA while ramp loading as taught by Kelemen for the purpose as stated in column 8, lines 8-13.

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Regarding claim 6: claim 6 has limitations similar to those treated in the above rejection(s), and is met by the references as discussed above. Claim 6 however also recites the following limitations as taught by the combination of Bement and Kelemen: actuating the RSA bias mechanism to cause an inner edge of the slider to be higher relative to the disk than an outer edge of the slider (see col. 4, ln. 63-col. 5, ln. 6 of Bement; the roll of the slider can be controlled in either direction).

Regarding claims 7-10: claims 7-10 have limitations similar to those treated in the above rejection(s), and are met by the references as discussed above.

Regarding claims 11-14: claims 11-14 have limitations similar to those treated in the above rejection(s), and are met by the references as discussed above.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-14 have been considered but are moot in view of the new ground(s) of rejection. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bement et al. (US 6,765,765 and Kelemen (US 6,757,124).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason C. Olson whose telephone number is (571)272-7560. The examiner can normally be reached on Monday thru Thursday 7:30-5:30; alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Hudspeth can be reached on (571)272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JCO

September 13, 2005



  
DAVID HUDSPETH  
SUPERVISORY PATENT EXAMINER  
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